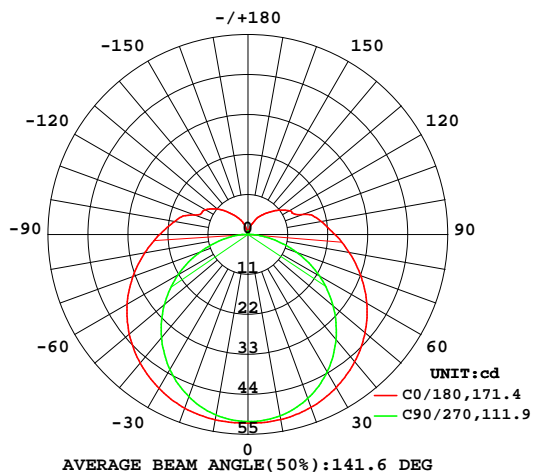


## LUMINAIRE PHOTOMETRIC TEST REPORT

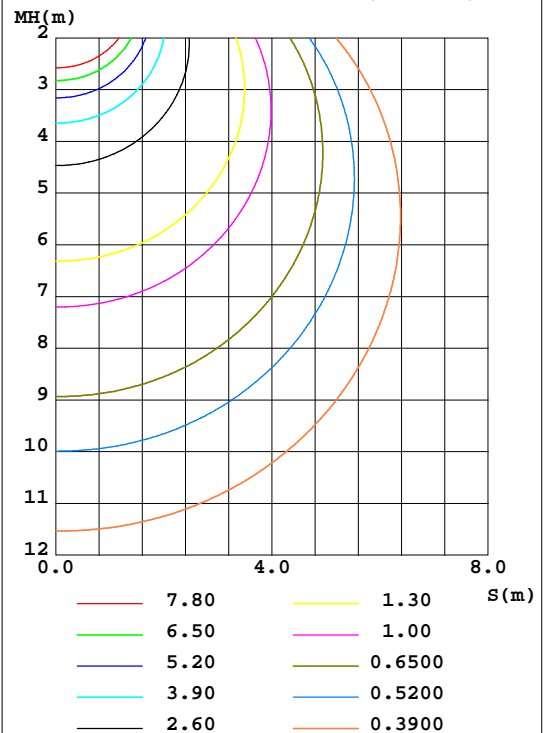
|   |                    |                  |
|---|--------------------|------------------|
| Test:U:24.00V I:0.5030A P:12.07W PF:1.000 Freq:0Hz Lamp Flux:236.178x1 lm |                    |                  |
| NAME: NNS1224   | TYPE:              | WEIGHT:          |
| SPEC.:NNS1224-0RGB24CSS050CC0100  | DIM.: 1000*12*24mm | SERIAL No.:      |
| MFR.: Colors  | SUR.:1000*12       | Shielding Angle: |

| DATA OF LAMP     |         | PHOTOMETRIC DATA Eff: 19.57 lm/W |         |                   |          |
|------------------|---------|----------------------------------|---------|-------------------|----------|
| MODEL            | NNS1224 | I <sub>max</sub> (cd)            | 51.89   | S/MH(C0/180)      | 1.42     |
| NOMINAL POWER(W) | 12      | LOR(%)                           | 100.0   | S/MH(C90/270)     | 1.24     |
| RATED VOLTAGE(V) | 24      | TOTAL FLUX(lm)                   | 236.18  | h UP,DN(C0-180)   | 9.0,40.8 |
| NOMINAL FLUX(lm) | 236.178 | CIE CLASS                        | SEMI-D. | h UP,DN(C180-360) | 9.1,41.0 |
| LAMPS INSIDE     | 1       | h up(%)                          | 18.2    | CIBSE SHR NOM     | 1.50     |
| TEST VOLTAGE(V)  | 24      | h down(%)                        | 81.8    | CIBSE SHR MAX     | 1.50     |

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:COLORS  
 Test Date:2019-07-01

g Range: 0 - 180DEG  
 Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity:65.0%  
 Test Distance:10.750m [K=1.0000]  
 Remarks:

## ZONAL FLUX DIAGRAM

### ZONAL FLUX DIAGRAM:

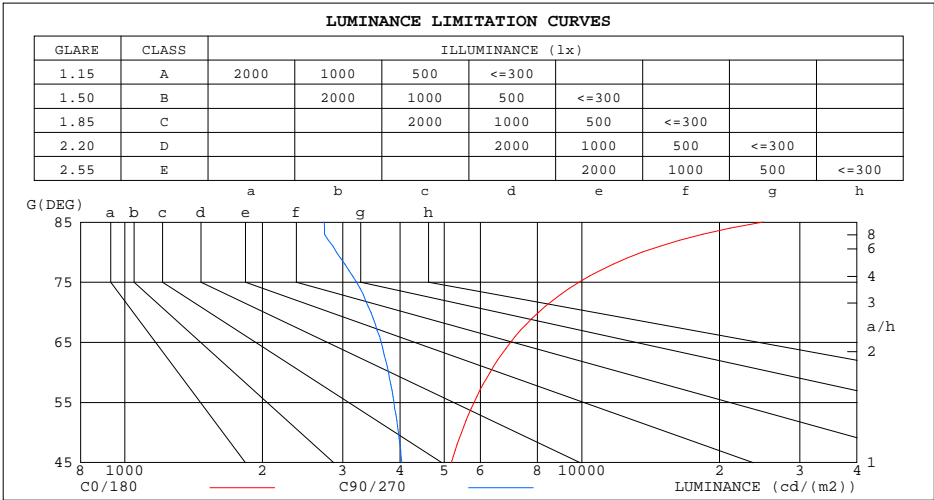
| g   | C0                    | C90    | C180   | C270   |  |  |  |  | g       | F zone  | F total | %lum,lamp |
|-----|-----------------------|--------|--------|--------|--|--|--|--|---------|---------|---------|-----------|
| 10  | 51.70                 | 50.67  | 51.76  | 50.43  |  |  |  |  | 0~ 10   | 4.908   | 4.908   | 2.08,2.08 |
| 20  | 50.64                 | 48.03  | 50.86  | 47.51  |  |  |  |  | 10~ 20  | 14.24   | 19.15   | 8.11,8.11 |
| 30  | 48.61                 | 43.64  | 48.92  | 42.97  |  |  |  |  | 20~ 30  | 22.05   | 41.20   | 17.4,17.4 |
| 40  | 45.70                 | 37.73  | 46.16  | 37.01  |  |  |  |  | 30~ 40  | 27.53   | 68.73   | 29.1,29.1 |
| 50  | 42.07                 | 30.61  | 42.64  | 30.03  |  |  |  |  | 40~ 50  | 30.19   | 98.93   | 41.9,41.9 |
| 60  | 37.76                 | 22.67  | 38.41  | 22.23  |  |  |  |  | 50~ 60  | 29.87   | 128.8   | 54.5,54.5 |
| 70  | 33.00                 | 14.18  | 33.67  | 13.93  |  |  |  |  | 60~ 70  | 26.76   | 155.6   | 65.9,65.9 |
| 80  | 28.23                 | 6.051  | 28.78  | 6.111  |  |  |  |  | 70~ 80  | 21.60   | 177.2   | 75,75     |
| 90  | 23.96                 | 0.9575 | 24.32  | 1.522  |  |  |  |  | 80~ 90  | 16.07   | 193.2   | 81.8,81.8 |
| 100 | 20.56                 | 0.1934 | 20.61  | 0.2318 |  |  |  |  | 90~100  | 12.49   | 205.7   | 87.1,87.1 |
| 110 | 16.31                 | 0.2898 | 15.79  | 0.2189 |  |  |  |  | 100~110 | 10.07   | 215.8   | 91.4,91.4 |
| 120 | 13.19                 | 0.4121 | 13.67  | 0.3345 |  |  |  |  | 110~120 | 7.215   | 223.0   | 94.4,94.4 |
| 130 | 10.38                 | 0.5023 | 10.95  | 0.4243 |  |  |  |  | 120~130 | 5.607   | 228.6   | 96.8,96.8 |
| 140 | 7.621                 | 0.5668 | 7.743  | 0.5018 |  |  |  |  | 130~140 | 3.755   | 232.4   | 98.4,98.4 |
| 150 | 5.424                 | 0.6567 | 5.242  | 0.6089 |  |  |  |  | 140~150 | 2.227   | 234.6   | 99.3,99.3 |
| 160 | 3.023                 | 0.7858 | 2.990  | 0.7273 |  |  |  |  | 150~160 | 1.127   | 235.7   | 99.8,99.8 |
| 170 | 0.8692                | 0.9270 | 0.9089 | 0.8810 |  |  |  |  | 160~170 | 0.3811  | 236.1   | 100,100   |
| 180 | 0.8112                | 0.9914 | 0.8240 | 0.9657 |  |  |  |  | 170~180 | 0.0842  | 236.2   | 100,100   |
| DEG | LUMINOUS INTENSITY:cd |        |        |        |  |  |  |  |         | UNIT:lm |         |           |

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:COLORS  
Test Date:2019-07-01

g Range: 0 - 180DEG  
g Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:10.750m [K=1.0000]  
Remarks:

LUMINANCE LIMITATION CURVES

|   |                    |                  |
|---|--------------------|------------------|
| Test:U:24.00V I:0.5030A P:12.07W PF:1.000 Freq:0Hz Lamp Flux:236.178x1 lm |                    |                  |
| NAME: NNS1224   | TYPE:              | WEIGHT:          |
| SPEC.:NNS1224-0RGB24CSS050CC0100  | DIM.: 1000*12*24mm | SERIAL No.:      |
| MFR.: Colors  | SUR.:1000*12       | Shielding Angle: |



| LUMINANCE cd/(m2) |        |         |
|-------------------|--------|---------|
| G(180)            | C0/180 | C90/270 |
| 85                | 24906  | 2731    |
| 80                | 13547  | 2904    |
| 75                | 9857   | 3215    |
| 70                | 8040   | 3456    |
| 65                | 6983   | 3640    |
| 60                | 6293   | 3778    |
| 55                | 5809   | 3880    |
| 50                | 5454   | 3968    |
| 45                | 5183   | 4040    |

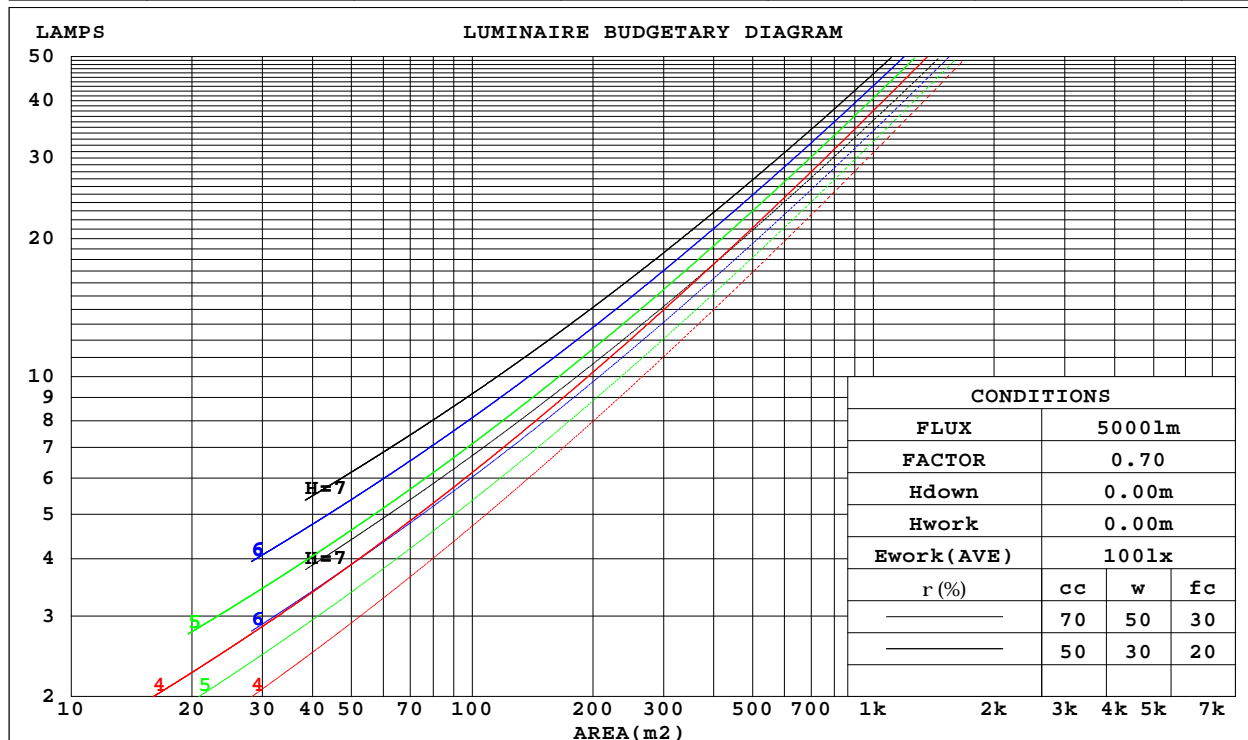
C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:COLORS  
Test Date:2019-07-01

g Range: 0 - 180DEG  
g Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:10.750m [K=1.0000]  
Remarks:

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

|   |                    |                  |
|---|--------------------|------------------|
| Test:U:24.00V I:0.5030A P:12.07W PF:1.000 Freq:0Hz Lamp Flux:236.178x1 lm |                    |                  |
| NAME: NNS1224   | TYPE:              | WEIGHT:          |
| SPEC.:NNS1224-0RGB24CSS050CC0100  | DIM.: 1000*12*24mm | SERIAL No.:      |
| MFR.: Colors  | SUR.:1000*12       | Shielding Angle: |

| r <sub>cc</sub> | 80%  |      |      | 70%  |      |      | 50%  |      |      | 30% |     |     | 10% |     |     | 0   |
|-----------------|--|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|
| r <sub>w</sub>  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 50% | 30% | 10% | 50% | 30% | 10% | 0   |
| r <sub>fc</sub> | 20%  |      |      | 20%  |      |      | 20%  |      |      | 20% |     |     | 20% |     |     | 0   |
| RCR             | RCR:Room Cavity Ratio                      Coefficients of Utilization(CU) |      |      |      |      |      |      |      |      |     |     |     |     |     |     |     |
| 0.0             | 1.15   | 1.15 | 1.15 | 1.10 | 1.10 | 1.10 | 1.01 | 1.01 | 1.01 | .93 | .93 | .93 | .85 | .85 | .85 | .82 |
| 1.0             | .96  | .91  | .86  | .92  | .87  | .83  | .84  | .80  | .77  | .77 | .74 | .71 | .71 | .68 | .66 | .63 |
| 2.0             | .82  | .74  | .68  | .79  | .72  | .66  | .72  | .66  | .61  | .66 | .61 | .57 | .60 | .57 | .53 | .50 |
| 3.0             | .71  | .62  | .55  | .68  | .60  | .54  | .63  | .56  | .50  | .57 | .52 | .47 | .53 | .48 | .44 | .41 |
| 4.0             | .63  | .53  | .46  | .60  | .51  | .45  | .55  | .48  | .42  | .51 | .45 | .40 | .46 | .41 | .37 | .34 |
| 5.0             | .56  | .46  | .39  | .53  | .45  | .38  | .49  | .42  | .36  | .45 | .39 | .34 | .42 | .36 | .32 | .29 |
| 6.0             | .50  | .40  | .34  | .48  | .39  | .33  | .44  | .37  | .31  | .41 | .34 | .29 | .38 | .32 | .28 | .25 |
| 7.0             | .45  | .36  | .30  | .43  | .35  | .29  | .40  | .33  | .27  | .37 | .31 | .26 | .34 | .29 | .25 | .22 |
| 8.0             | .41  | .32  | .26  | .39  | .31  | .25  | .36  | .29  | .24  | .34 | .28 | .23 | .31 | .26 | .22 | .20 |
| 9.0             | .37  | .29  | .23  | .36  | .28  | .23  | .33  | .27  | .22  | .31 | .25 | .21 | .29 | .24 | .20 | .18 |
| 10.0            | .34  | .26  | .21  | .33  | .26  | .20  | .31  | .24  | .20  | .29 | .23 | .19 | .27 | .21 | .18 | .16 |



C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:COLORS  
 Test Date:2019-07-01

g Range: 0 - 180DEG  
 g Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity:65.0%  
 Test Distance:10.750m [K=1.0000]  
 Remarks:

## WEC AND CCEC

|   |                    |                  |
|---|--------------------|------------------|
| Test:U:24.00V I:0.5030A P:12.07W PF:1.000 Freq:0Hz Lamp Flux:236.178x1 lm |                    |                  |
| NAME: NNS1224   | TYPE:              | WEIGHT:          |
| SPEC.:NNS1224-0RGB24CSS050CC0100  | DIM.: 1000*12*24mm | SERIAL No.:      |
| MFR.: Colors  | SUR.:1000*12       | Shielding Angle: |

|      |   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |   |
|------|---|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---|
| rcc  | 80%   |      |      | 70%  |      |      | 50%  |      |      | 30%  |      |      | 10%  |      |      | 0 |
| rw   | 50%   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0 |
| rfc  | 20%   |      |      | 20%  |      |      | 20%  |      |      | 20%  |      |      | 20%  |      |      | 0 |
| RCR  | RCR:Room Cavity Ratio Wall Exitance Coefficients(WEC) |      |      |      |      |      |      |      |      |      |      |      |      |      |      |   |
| 0.0  |   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |   |
| 1.0  | .377  | .214 | .068 | .364 | .208 | .066 | .340 | .195 | .062 | .318 | .183 | .059 | .298 | .173 | .056 |   |
| 2.0  | .329  | .180 | .055 | .317 | .175 | .054 | .295 | .164 | .051 | .276 | .155 | .048 | .257 | .145 | .046 |   |
| 3.0  | .293  | .156 | .047 | .283 | .151 | .046 | .263 | .143 | .043 | .245 | .134 | .041 | .228 | .126 | .039 |   |
| 4.0  | .264  | .137 | .040 | .255 | .133 | .039 | .237 | .126 | .038 | .221 | .119 | .036 | .206 | .112 | .034 |   |
| 5.0  | .241  | .123 | .036 | .232 | .119 | .035 | .216 | .113 | .033 | .201 | .106 | .032 | .187 | .100 | .030 |   |
| 6.0  | .221  | .111 | .032 | .213 | .108 | .031 | .198 | .102 | .030 | .185 | .096 | .028 | .172 | .090 | .027 |   |
| 7.0  | .204  | .101 | .029 | .197 | .098 | .028 | .183 | .093 | .027 | .171 | .088 | .025 | .159 | .083 | .024 |   |
| 8.0  | .189  | .092 | .026 | .183 | .090 | .025 | .170 | .085 | .024 | .159 | .080 | .023 | .148 | .076 | .022 |   |
| 9.0  | .176  | .085 | .024 | .170 | .083 | .023 | .159 | .079 | .022 | .148 | .074 | .021 | .138 | .070 | .020 |   |
| 10.0 | .165  | .079 | .022 | .160 | .077 | .022 | .149 | .073 | .021 | .139 | .069 | .020 | .130 | .065 | .019 |   |

|      |  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |   |
|------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---|
| rcc  | 80%  |      |      | 70%  |      |      | 50%  |      |      | 30%  |      |      | 10%  |      |      | 0 |
| rw   | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0 |
| rfc  | 20%  |      |      | 20%  |      |      | 20%  |      |      | 20%  |      |      | 20%  |      |      | 0 |
| RCR  | RCR:Room Cavity Ratio Ceiling Cavity Exitance Coefficients(CCEC) |      |      |      |      |      |      |      |      |      |      |      |      |      |      |   |
| 0.0  | .329   | .329 | .329 | .281 | .281 | .281 | .192 | .192 | .192 | .110 | .110 | .110 | .035 | .035 | .035 |   |
| 1.0  | .325   | .295 | .269 | .278 | .253 | .231 | .190 | .174 | .160 | .109 | .101 | .093 | .035 | .032 | .030 |   |
| 2.0  | .318   | .272 | .234 | .272 | .234 | .202 | .187 | .162 | .141 | .108 | .094 | .083 | .035 | .031 | .027 |   |
| 3.0  | .310   | .256 | .212 | .266 | .221 | .184 | .183 | .153 | .129 | .105 | .090 | .076 | .034 | .029 | .025 |   |
| 4.0  | .303   | .243 | .198 | .260 | .210 | .172 | .179 | .147 | .121 | .103 | .086 | .072 | .033 | .028 | .024 |   |
| 5.0  | .295   | .234 | .188 | .253 | .202 | .164 | .175 | .141 | .116 | .101 | .083 | .069 | .033 | .027 | .023 |   |
| 6.0  | .288   | .226 | .181 | .247 | .195 | .158 | .171 | .137 | .112 | .099 | .080 | .066 | .032 | .026 | .022 |   |
| 7.0  | .281   | .219 | .176 | .241 | .190 | .153 | .167 | .133 | .109 | .097 | .078 | .065 | .031 | .026 | .021 |   |
| 8.0  | .274   | .213 | .172 | .236 | .185 | .150 | .163 | .130 | .106 | .095 | .077 | .063 | .031 | .025 | .021 |   |
| 9.0  | .268   | .209 | .169 | .231 | .181 | .147 | .160 | .127 | .105 | .093 | .075 | .062 | .030 | .025 | .021 |   |
| 10.0 | .262   | .204 | .166 | .226 | .178 | .145 | .157 | .125 | .103 | .091 | .074 | .062 | .030 | .024 | .020 |   |

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:COLORS  
Test Date:2019-07-01

g Range: 0 - 180DEG  
g Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:10.750m [K=1.0000]  
Remarks:

UGR(Unified Glare Rating) Table

|   |               |                  |      |      |                    |                |      |                  |      |      |      |
|---|---------------|------------------|------|------|--------------------|----------------|------|------------------|------|------|------|
| Test:U:24.00V I:0.5030A P:12.07W PF:1.000 Freq:0Hz Lamp Flux:236.178x1 lm |               |                  |      |      |                    |                |      |                  |      |      |      |
| NAME: NNS1224   |               |                  |      |      | TYPE:              |                |      | WEIGHT:          |      |      |      |
| SPEC.:NNS1224-0RGB24CSS050CC0100  |               |                  |      |      | DIM.: 1000*12*24mm |                |      | SERIAL No.:      |      |      |      |
| MFR.: Colors  |               |                  |      |      | SUR.:1000*12       |                |      | Shielding Angle: |      |      |      |
| ceiling/cavity  | 0.7           | 0.7              | 0.5  | 0.5  | 0.3                | 0.7            | 0.7  | 0.5              | 0.5  | 0.3  |      |
| walls   | 0.5           | 0.3              | 0.5  | 0.3  | 0.3                | 0.5            | 0.3  | 0.5              | 0.3  | 0.3  |      |
| working plane   | 0.2           | 0.2              | 0.2  | 0.2  | 0.2                | 0.2            | 0.2  | 0.2              | 0.2  | 0.2  |      |
| Room dimensions   |               | Viewed crosswise |      |      |                    | Viewed endwise |      |                  |      |      |      |
| x = 2H y = 2H   | 23.2          | 24.5             | 23.7 | 25.0 | 25.6               | 21.3           | 22.7 | 21.9             | 23.2 | 23.8 |      |
|   | 3H            | 25.8             | 27.0 | 26.3 | 27.6               | 28.2           | 22.9 | 24.2             | 23.5 | 24.7 | 25.3 |
|   | 4H            | 27.3             | 28.5 | 27.8 | 29.0               | 29.6           | 23.5 | 24.7             | 24.1 | 25.3 | 25.9 |
|   | 6H            | 28.9             | 30.0 | 29.5 | 30.6               | 31.3           | 24.0 | 25.1             | 24.6 | 25.7 | 26.4 |
|   | 8H            | 29.8             | 30.9 | 30.4 | 31.5               | 32.2           | 24.2 | 25.2             | 24.8 | 25.8 | 26.5 |
|   | 12H           | 30.9             | 31.9 | 31.5 | 32.5               | 33.2           | 24.3 | 25.3             | 24.9 | 25.9 | 26.6 |
| 4H  | 2H            | 23.7             | 24.9 | 24.2 | 25.4               | 26.1           | 22.4 | 23.6             | 22.9 | 24.1 | 24.7 |
|   | 3H            | 26.5             | 27.6 | 27.1 | 28.2               | 28.8           | 24.2 | 25.2             | 24.8 | 25.8 | 26.5 |
|   | 4H            | 28.1             | 29.1 | 28.8 | 29.7               | 30.4           | 25.0 | 26.0             | 25.6 | 26.6 | 27.3 |
|   | 6H            | 30.0             | 30.8 | 30.6 | 31.5               | 32.2           | 25.7 | 26.5             | 26.3 | 27.2 | 27.9 |
|   | 8H            | 31.0             | 31.8 | 31.7 | 32.5               | 33.3           | 25.9 | 26.7             | 26.6 | 27.4 | 28.1 |
|   | 12H           | 32.3             | 33.0 | 32.9 | 33.7               | 34.5           | 26.1 | 26.8             | 26.8 | 27.5 | 28.3 |
| 8H  | 4H            | 28.4             | 29.2 | 29.1 | 29.9               | 30.6           | 25.9 | 26.7             | 26.5 | 27.3 | 28.1 |
|   | 6H            | 30.5             | 31.2 | 31.2 | 31.9               | 32.7           | 26.9 | 27.5             | 27.6 | 28.2 | 29.0 |
|   | 8H            | 31.8             | 32.4 | 32.5 | 33.1               | 33.9           | 27.3 | 27.9             | 28.0 | 28.6 | 29.4 |
|   | 12H           | 33.2             | 33.8 | 34.0 | 34.5               | 35.3           | 27.7 | 28.2             | 28.4 | 28.9 | 29.8 |
| 12H   | 4H            | 28.4             | 29.2 | 29.1 | 29.8               | 30.6           | 26.1 | 26.9             | 26.8 | 27.5 | 28.3 |
|   | 6H            | 30.6             | 31.2 | 31.3 | 31.9               | 32.7           | 27.3 | 27.9             | 28.0 | 28.6 | 29.4 |
|   | 8H            | 31.9             | 32.5 | 32.7 | 33.2               | 34.0           | 27.9 | 28.4             | 28.6 | 29.2 | 30.0 |
| Variations with the observer position at spacings:                        |               |                  |      |      |                    |                |      |                  |      |      |      |
| S = 1.0H  | + 0.1 / - 0.1 |                  |      |      |                    | + 0.1 / - 0.2  |      |                  |      |      |      |
| 1.5H  | + 0.2 / - 0.2 |                  |      |      |                    | + 0.2 / - 0.3  |      |                  |      |      |      |
| 2.0H  | + 0.2 / - 0.3 |                  |      |      |                    | + 0.2 / - 0.5  |      |                  |      |      |      |

CIE Pub.117, 236.2 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -5.0)

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:COLORS  
Test Date:2019-07-01

g Range: 0 - 180DEG  
g Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:10.750m [K=1.0000]  
Remarks:

### UTILIZATION FACTORS TABLE

|   |                    |                  |
|---|--------------------|------------------|
| Test:U:24.00V I:0.5030A P:12.07W PF:1.000 Freq:0Hz Lamp Flux:236.178x1 lm |                    |                  |
| NAME: NNS1224   | TYPE:              | WEIGHT:          |
| SPEC.:NNS1224-0RGB24CSS050CC0100  | DIM.: 1000*12*24mm | SERIAL No.:      |
| MFR.: Colors  | SUR.:1000*12       | Shielding Angle: |

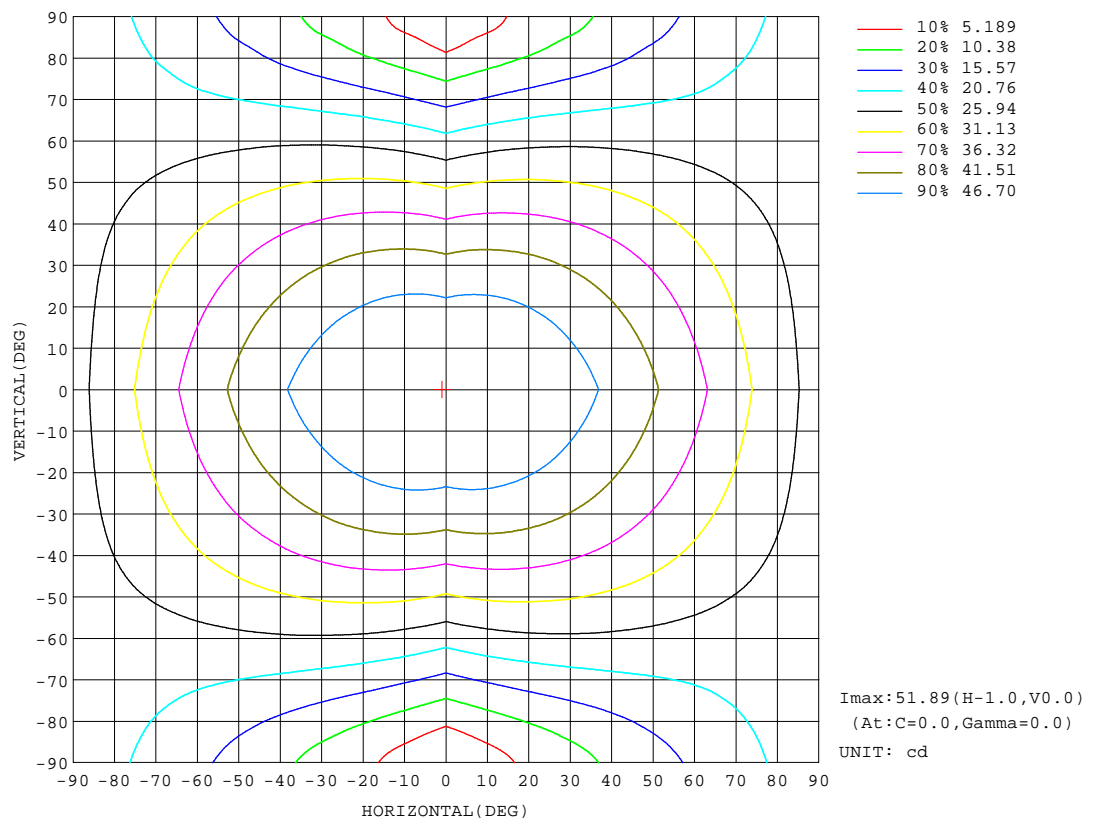
| REFLECTANCE                      |   |     |           |     |     |     |     |               |     |        |
|----------------------------------|---|-----|-----------|-----|-----|-----|-----|---------------|-----|--------|
| Ceiling                          | 0.8   | 0.8 | 0.8       | 0.7 | 0.7 | 0.7 | 0.5 | 0.5           | 0.5 | 0      |
| Walls                            | 0.7   | 0.5 | 0.3       | 0.7 | 0.5 | 0.3 | 0.7 | 0.5           | 0.3 | 0      |
| Working plane                    | 0.2   | 0.2 | 0.2       | 0.2 | 0.2 | 0.2 | 0.2 | 0.2           | 0.2 | 0      |
| ROOM INDEX                       | UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$ |     |           |     |     |     |     |               |     |        |
| k = 0.60                         | 48  | 36  | 28        | 47  | 35  | 28  | 45  | 34            | 28  | 21     |
| 0.80                             | 57  | 44  | 36        | 56  | 44  | 36  | 53  | 42            | 35  | 27     |
| 1.00                             | 65  | 52  | 44        | 63  | 51  | 43  | 59  | 52            | 42  | 33     |
| 1.25                             | 72  | 59  | 51        | 70  | 58  | 50  | 65  | 56            | 48  | 39     |
| 1.50                             | 77  | 65  | 57        | 74  | 63  | 55  | 69  | 60            | 53  | 43     |
| 2.00                             | 84  | 73  | 65        | 81  | 71  | 64  | 76  | 67            | 61  | 49     |
| 2.50                             | 89  | 79  | 71        | 85  | 76  | 69  | 79  | 72            | 66  | 53     |
| 3.00                             | 93  | 83  | 76        | 89  | 81  | 74  | 82  | 76            | 70  | 57     |
| 4.00                             | 97  | 89  | 83        | 93  | 86  | 81  | 86  | 81            | 76  | 61     |
| 5.00                             | 100   | 93  | 88        | 96  | 90  | 85  | 89  | 84            | 79  | 64     |
| ROOM INDEX                       | UF(total)   |     |           |     |     |     |     |               |     | Direct |
| According to DIN EN 13032-2 2004 |   |     | Suspended |     |     |     |     | SHRNOM = 1.25 |     |        |

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:COLORS  
Test Date:2019-07-01

g Range: 0 - 180DEG  
g Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:10.750m [K=1.0000]  
Remarks:

# ISOCANDELA DIAGRAM

|   |                    |                  |
|---|--------------------|------------------|
| Test:U:24.00V I:0.5030A P:12.07W PF:1.000 Freq:0Hz Lamp Flux:236.178x1 lm |                    |                  |
| NAME: NNS1224   | TYPE:              | WEIGHT:          |
| SPEC.:NNS1224-0RGB24CSS050CC0100  | DIM.: 1000*12*24mm | SERIAL No.:      |
| MFR.: Colors  | SUR.:1000*12       | Shielding Angle: |



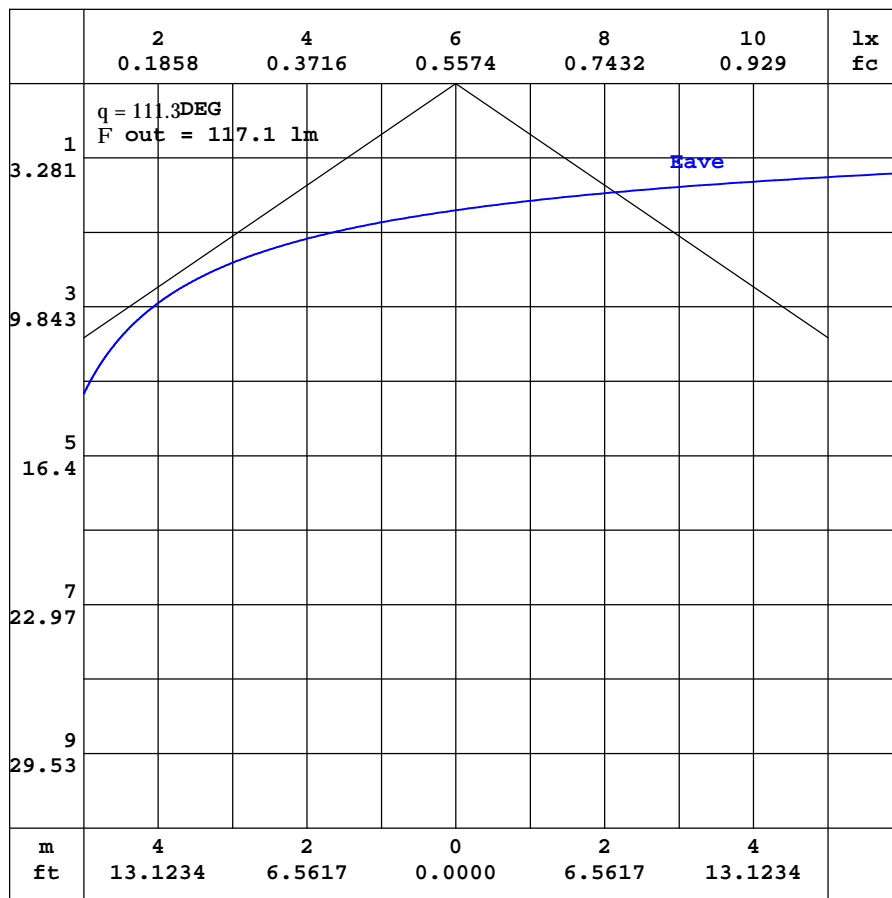
C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:COLORS  
Test Date:2019-07-01

Range: 0 - 180DEG  
Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:10.750m [K=1.0000]  
Remarks:



AAI CURVES

|   |                    |                  |
|---|--------------------|------------------|
| Test:U:24.00V I:0.5030A P:12.07W PF:1.000 Freq:0Hz Lamp Flux:236.178x1 lm |                    |                  |
| NAME: NNS1224   | TYPE:              | WEIGHT:          |
| SPEC.:NNS1224-0RGB24CSS050CC0100  | DIM.: 1000*12*24mm | SERIAL No.:      |
| MFR.: Colors  | SUR.:1000*12       | Shielding Angle: |



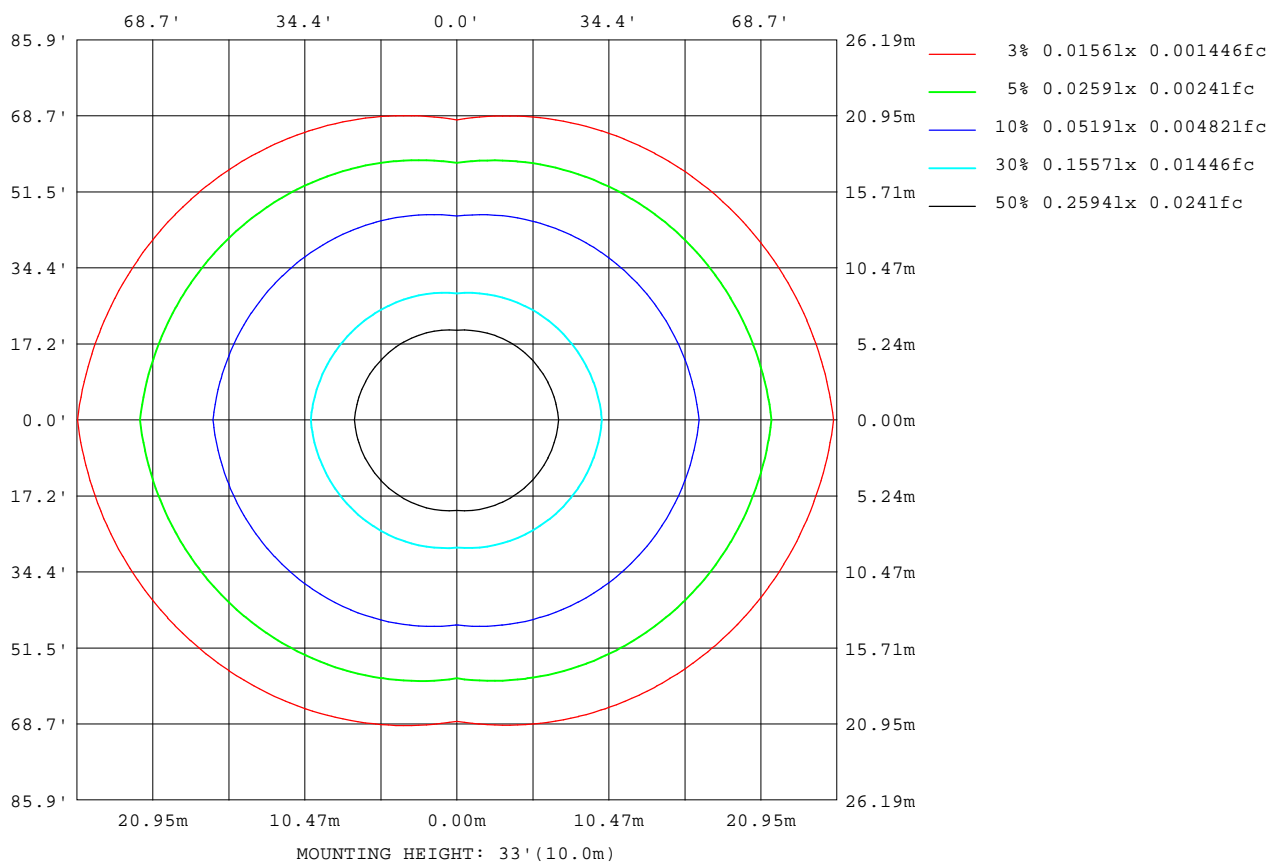
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:COLORS  
Test Date:2019-07-01

g Range: 0 - 180DEG  
g Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:10.750m [K=1.0000]  
Remarks:

### ISOLUX DIAGRAM

|   |                    |                  |
|---|--------------------|------------------|
| Test:U:24.00V I:0.5030A P:12.07W PF:1.000 Freq:0Hz Lamp Flux:236.178x1 lm |                    |                  |
| NAME: NNS1224   | TYPE:              | WEIGHT:          |
| SPEC.:NNS1224-0RGB24CSS050CC0100  | DIM.: 1000*12*24mm | SERIAL No.:      |
| MFR.: Colors  | SUR.:1000*12       | Shielding Angle: |



C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:COLORS  
Test Date:2019-07-01

g Range: 0 - 180DEG  
g Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:10.750m [K=1.0000]  
Remarks:

### LED Avg.L Report

|   |                    |                  |
|---|--------------------|------------------|
| Test:U:24.00V I:0.5030A P:12.07W PF:1.000 Freq:0Hz Lamp Flux:236.178x1 lm |                    |                  |
| NAME: NNS1224   | TYPE:              | WEIGHT:          |
| SPEC.:NNS1224-0RGB24CSS050CC0100  | DIM.: 1000*12*24mm | SERIAL No.:      |
| MFR.: Colors  | SUR.:1000*12       | Shielding Angle: |

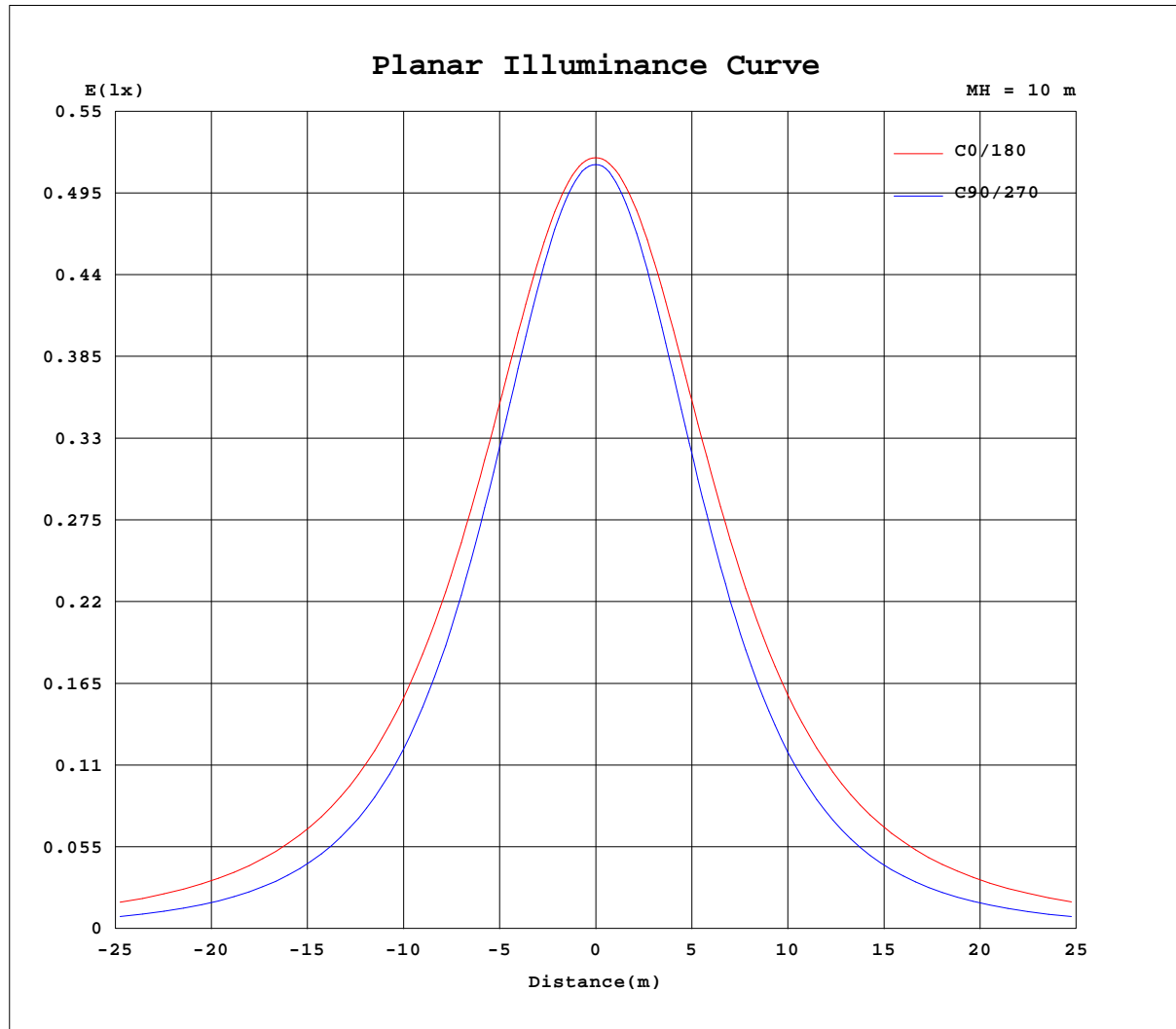
| AvgL           | cd/m2 |
|----------------|-------|
| L_0~180(65)av  | 7050  |
| L_0~180(75)av  | 9953  |
| L_0~180(85)av  | 25095 |
| L_90~270(65)av | 3605  |
| L_90~270(75)av | 3196  |
| L_90~270(85)av | 2945  |
| L_45(65)av     | 4901  |
| L_45(75)av     | 5736  |
| L_45(85)av     | 11263 |

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:COLORS  
Test Date:2019-07-01

g Range: 0 - 180DEG  
g Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:10.750m [K=1.0000]  
Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: COLORS  
Test Date: 2019-07-01

Range: 0 - 180DEG  
Interval: 1.0DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity: 65.0%  
Test Distance: 10.750m [K=1.0000]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

|   |                    |                  |
|---|--------------------|------------------|
| Test:U:24.00V I:0.5030A P:12.07W PF:1.000 Freq:0Hz Lamp Flux:236.178x1 lm |                    |                  |
| NAME: NNS1224   | TYPE:              | WEIGHT:          |
| SPEC.:NNS1224-0RGB24CSS050CC0100  | DIM.: 1000*12*24mm | SERIAL No.:      |
| MFR.: Colors  | SUR.:1000*12       | Shielding Angle: |

Table--1

UNIT: cd

| C(DEG)<br>g (DEG) | 0    | 90   | 180  | 270  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------|------|------|------|------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| 0                 | 51.9 | 51.4 | 51.9 | 51.4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5                 | 51.9 | 51.3 | 51.9 | 51.2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10                | 51.7 | 50.7 | 51.8 | 50.4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15                | 51.3 | 49.6 | 51.4 | 49.2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20                | 50.6 | 48.0 | 50.9 | 47.5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 25                | 49.7 | 46.0 | 50.0 | 45.4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 30                | 48.6 | 43.6 | 48.9 | 43.0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 35                | 47.2 | 40.8 | 47.6 | 40.1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 40                | 45.7 | 37.7 | 46.2 | 37.0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 45                | 44.0 | 34.3 | 44.5 | 33.6 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 50                | 42.1 | 30.6 | 42.6 | 30.0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 55                | 40.0 | 26.7 | 40.6 | 26.2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 60                | 37.8 | 22.7 | 38.4 | 22.2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 65                | 35.4 | 18.5 | 36.1 | 18.1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 70                | 33.0 | 14.2 | 33.7 | 13.9 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 75                | 30.6 | 9.98 | 31.2 | 9.87 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 80                | 28.2 | 6.05 | 28.8 | 6.11 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 85                | 26.0 | 2.86 | 26.4 | 3.30 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 90                | 24.0 | 0.96 | 24.3 | 1.52 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 95                | 22.1 | 0.30 | 22.4 | 0.43 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 100               | 20.6 | 0.19 | 20.6 | 0.23 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 105               | 19.0 | 0.23 | 19.0 | 0.22 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 110               | 16.3 | 0.29 | 15.8 | 0.22 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 115               | 13.8 | 0.35 | 14.1 | 0.28 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 120               | 13.2 | 0.41 | 13.7 | 0.33 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 125               | 11.7 | 0.46 | 12.4 | 0.38 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 130               | 10.4 | 0.50 | 10.9 | 0.42 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 135               | 8.96 | 0.54 | 9.35 | 0.48 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 140               | 7.62 | 0.57 | 7.74 | 0.50 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 145               | 6.47 | 0.61 | 6.38 | 0.56 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 150               | 5.42 | 0.66 | 5.24 | 0.61 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 155               | 4.01 | 0.71 | 4.17 | 0.66 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 160               | 3.02 | 0.79 | 2.99 | 0.73 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 165               | 2.13 | 0.86 | 1.48 | 0.80 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 170               | 0.87 | 0.93 | 0.91 | 0.88 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 175               | 0.82 | 0.98 | 0.75 | 0.93 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 180               | 0.81 | 0.99 | 0.82 | 0.97 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:COLORS  
Test Date:2019-07-01

g Range: 0 - 180DEG  
Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:10.750m [K=1.0000]  
Remarks: